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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/069,516

03/04/2002

Hideto Aikawa

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9767

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7590

10/24/2006

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EXAMINER

GHEBRETINSAB, TEMESGHEN

ART UNIT

PAPER NUMBER

2611

DATE MAILED: 10/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	10/069,516	AIKAWA ET AL.	
	Examiner	Art Unit	
	Jacob Meek	2637	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 12/6/2006.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1 - 18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 16 and 17 is/are rejected.
- 7) ☒ Claim(s) 3 - 15, 18 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 March 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Drawings***

1. Figure 4 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 2, 16, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kondo (US-6,222,834).

With regard to claim 1, Kondo discloses a timing correcting device comprising: a path detecting unit (see figure 1, 120, 150 and column 3, lines 6 - 15); a path selecting unit configured to track an optimum path timing that should be tracked based on result of detection and predetermined reference standard wherein plurality of path candidates are

selected within a search window matched with reference timing (see column 4, lines 30 – 49 where this is interpreted as equivalent); a phase difference calculating unit configured to compare a predetermined reference timing given from the outside with path timing (see figure 1, 130), and calculates phase difference between two timings (see column 3, lines 16 – 21); and a timing correcting unit configured to correct the reception reference by controlling a clock based on the phase difference (see figure 1, 130 and column 4, line 55 – column 5, line 5). Kondo is silent with respect to a plurality of reference generating units. Kondo discloses the ability to select and track multiple paths (see column 6, line 61 – column 7, line 4), and further shows in admitted prior art a plurality of references (see figure 7, 40). While the arrangement of Kondo appears to differ from applicants (phase comparison and time correction in single unit), it has been held that the rearrangement of components involves only ordinary skill in the art.

With regard to claim 2, Kondo discloses a timing correcting device wherein the path selection unit comprises a path selection status, a forward alignment status, and a tracking path holding status (see figure 2 & 3, and column 5, lines 6 – 23); and discloses process for tracking paths (see column 5, lines 19 – 21). While not identically disclosed to applicant's function names, Kondo's "forward protection state", "backward protection state", "complete incoincident state", and "complete protection state" appear to describe a similar process to that claimed by applicant. While the functions are not named identically they appear to perform similar functions therefore the renaming of functions would have been obvious to one of ordinary

With regard to claim 16 and 17, the steps claimed as method are nothing more than a restatement of the functions of the apparatus of claims 1 and 2, and therefore would have been obvious given the aforementioned rejection of claims 1 and 2.

***Allowable Subject Matter***

3. Claims 3 – 15, 18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Other Cited Prior Art***

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Schulist et al (US-6,229,842) discloses detection of multiple paths and variable thresholding of signals that appears closely related to applicant's invention.

Oshuge (US-6,768,729, previously cited; US-6,763,056) discloses detection of multiple peaks and the tracking of paths closely related to applicant's invention. Oshuge ('056) is of particular interest.

Kubo et al (US-6,754,256) discloses detection of signal levels using a plurality of comparators in a path tracking device.

Sato (US 2001/0050950) discloses peak detection and threshold adjusting means for path detection.

Miura (US-6,333,934) discloses a level detection and path selection mechanism closely related to applicant's claimed invention.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jacob Meek whose telephone number is (571)272-3013. The examiner can normally be reached on 8:00 - 4:30.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jay Patel can be reached on (571)272-2988. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JMM  
2/14/06

RESGHEN GHERETINSAE  
PRIMARY EXAMINER  
2/21/06